REMARKS

Applicants thank the Examiner for the consideration given the present application. Claims 1, 2, 5, 6, and 13-16 are pending. Claims 4 and 8 were previously cancelled without prejudice or disclaimer. By the present Amendment, claims 3 and 7 are also cancelled without prejudice or disclaimer, and claims 9-12 remain withdrawn from consideration, and claims 13-16 are added herein to provide coverage to which Applicants are deemed entitled with respect to the prepolymer.

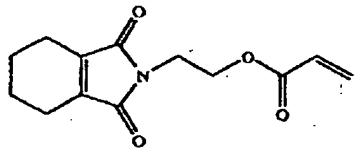
The feature now incorporated in claims 1 and 5 is similar to that recited in original claims 3 and 7 (now cancelled), but differs in that the prepolymer is not limited to the polyester-based prepolymer. Support for this feature can be found in the original specification, e.g., at page 9, lines 1-12. Thus, no new matter is presented, and no new issues are raised, since a similar feature was the subject of original claims 3 and 7. Accordingly, entry of this Amendment is in order, and such action is respectfully requested.

Reconsideration is requested of the rejection of claims 1-3 and 5-7 under 35 U.S.C. §103(a) as being unpatentable over Hasegawa et al. (U.S. 6,559,231) or Okazaki et al. (U.S. 6,645,617).

Hasegawa does not disclose the maleimide group of formula (1) of amended independent claims 1 and 5.

The Office Action contends that monomer (a) of Hasegawa reads on formula (1) of Applicants' independent claims 1 and 5. Applicants respectfully disagree:

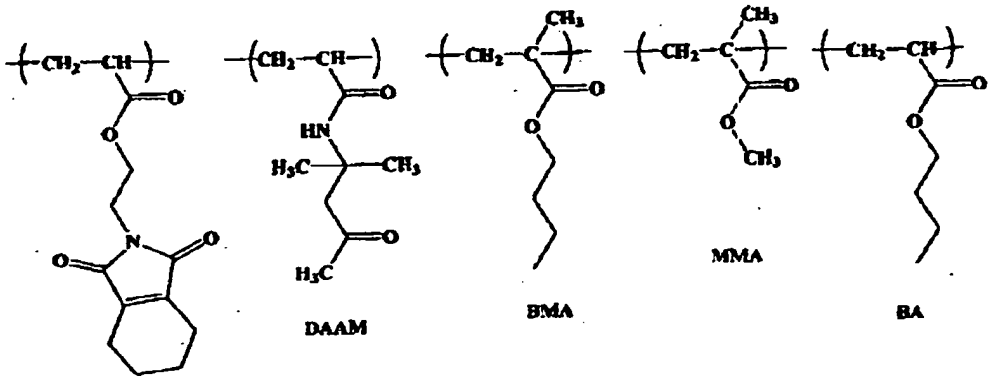
First, it should be noted that in the working examples, Hasegawa uses only monomer (a), which is represented by tetrahydrophthalimide group as a maleimide group. See, e.g., Hasegawa at column 18, line 1:



The above 3,4,5,6-tetrahydrophthalimide group differs from the maleimide group of formula (1) in amended independent claims 1 and 5 with respect to the so-called "citraconimide"group.

Second, Hasegawa neither discloses nor suggests the copolymer having a polyester backbone.

The Office Action asserts that copolymer (I) of Hasegawa would inherently have a polyester backbone. However, copolymer (I) of the Hasegawa working examples is composed of the following units. See Table 1 of Hasegawa at column 18.



(I)

These units apparently are derived from ethylenically unsaturated monomers which are to be radical-polymerized with each other and, thus, never have a polyester backbone which is produced by polycondensation reaction of dicarboxylic acids (HOOCACOOH) and diols (HOBOH), so as to have repeating units represented by $(OCACOOBO)_n$.

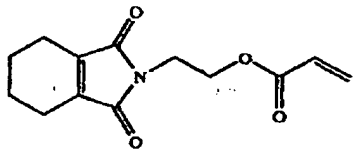
Moreover, Hasegawa is silent with respect to compounds (1)-(3) of Applicants' independent claims 1 and 5. Thus, Hasegawa does not disclose or suggest any backbone structure of the compounds claimed in Applicants' independent claims 1 and 5, and advantages of the present invention over Hasegawa are shown in the present specification.

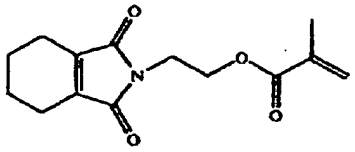
The present invention would not have been obvious over Hasegawa because Hasegawa does not disclose or suggest any backbone structure of the compound claimed in presently amended claims 1 and 5 and, as discussed above, is silent as to compounds (1)-(3) described in Applicants' independent claims 1 and 5. In addition, the prior art would not have led an ordinarily skilled worker from Hasegawa to the structurally divergent compounds as claimed. Furthermore, the advantages of the present invention using the citraconimide group over the 3,4,5,6-tetrahydrophthalimide group used in Hasegawa can be seen by comparing the Examples and Comparative Example 1. See, e.g., page 42, lines 4-14, and Table 1 on page 47 of the original specification.

Applicants courteously request the Examiner to reconsider and allow the presently claimed inventions.

Okazaki does not remedy the shortcomings of Hasegawa, since Okazaki also does not disclose the maleimide group of formula (1) of Applicants' independent claims 1 and 5.

Okazaki generically discloses imide(meth)acrylates of chemical formula (1). However, in the working examples, Okazaki uses only two monomers that are respectively represented by the formulae below, and both contain a 3,4,5,6-tetrahydrophthalimide group as a maleimide group, as seen in the working Examples. See column 3, line 6, and Table 1 at column 11 of Okazaki:

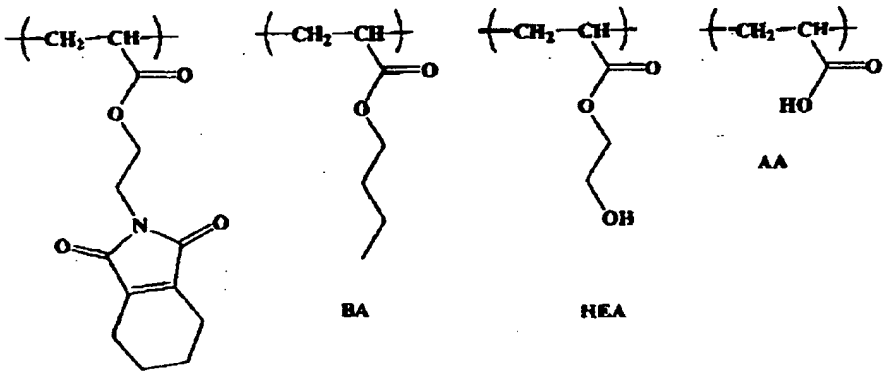




The above 3,4,5,6-tetrahydrophtalimide group differs from the maleimide group of Applicants' formula (1) as set forth in independent claims 1 and 5 in view of the previously discussed citraconimide group.

In addition, Okazaki does not disclose or suggest a copolymer having a polyester backbone. The Office Action maintains Okazaki's copolymer would inherently have a polyester backbone. However, the copolymer prepared in the

working examples of Okazaki is composed of the following units. See adhesives a1, a4, and a5 in Table 1 of Okazaki at column 11:



These units appear to be derived from ethylenically unsaturated monomers which are to be radical-polymerized and, thus, never have a polyester backbone which is produced by polycondensation reaction of dicarboxylic acids (HOOCACOOH) and diols (HOBOH) so as to have repeating units represented by $(OCACOOBO)_n$.

Moreover, Okazaki is silent as to compounds (1)-(3) as described in Applicants' independent claims 1 and 5.

Accordingly, Okazaki neither discloses nor would it have suggested any backbone structure of the compound as claimed in presently amended independent claims 1 and 5. The present invention would not have been obvious over Okazaki because Okazaki neither discloses nor suggests any backbone

structure of the compound claimed in instant claims 1 and 5 and is silent about the compounds (1) and (3) described in instant claims 1 and 5 as mentioned above.

In addition, the advantages of present invention over Okazaki are also clear from the present application. The advantages of the present invention come from using the citraconimide group over the 3,4,5,6-tetrahydrophthalimide group used in Okazaki and can be seen, e.g., by comparing the Examples and Comparative Example 1. See, e.g., page 42, lines 4-14, and Table 1 at page 47 of the present specification.

Indeed, even if Hasegawa and Okazaki were combinable, which they are not, neither of these references discloses or suggests any backbone structure of the compound claimed in amended independent claims 1 and 5, nor do these references disclose or suggest compounds (1)-3) of independent claims 1 and 5. Thus, the present invention is not obvious over Hasegawa and Okazaki.

Applicants, therefore, courteously request the Examiner to allow the presently claimed inventions.

In view of the foregoing amendments and remarks, reconsideration and withdrawal of the outstanding rejection are respectfully requested. The present application is in condition for allowance, and such action is urged.

To the extent necessary during prosecution, Applicants hereby request any required extension of time not otherwise requested and hereby authorize the Commissioner to charge any required fees not otherwise authorized, including application processing, extension, and extra claims fees, to Deposit Account 06-1135.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

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